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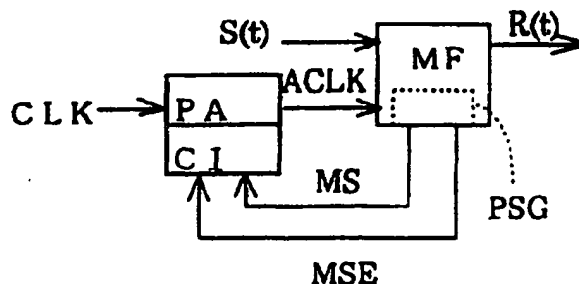
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(54) **Matched filter circuit**

(57) The present invention has an object to provide a matched filter circuit which is possible to synchronize a spreading code with an input signal. A matched filter according to the present invention samples input signal

in response to three clocks from the first to the third shifted by a half cycle of a sampling signal so as to judge whether the sampling clock is ahead or behind of the input signal according to signs of input signal sampled. One clock is selected to be the sampling clock.

**Fig. 1**





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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 11 7432

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	POVEY G J R ET AL: "SIMPLIFIED MATCHED FILTER RECEIVER DESIGNS FOR SPREAD SPECTRUM COMMUNICATIONS APPLICATIONS" ELECTRONICS AND COMMUNICATION ENGINEERING JOURNAL, INSTITUTION OF ELECTRICAL ENGINEERS, LONDON, GB, vol. 5, no. 2, 1 April 1993 (1993-04-01), pages 59-64, XP000363818 ISSN: 0954-0695 * page 59, left-hand column; figure 5 * * page 62, middle column, paragraph 4 *	1-6	H04B1/707 H04L7/033
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The present search report has been drawn up for all claims			
Place of search <b>MUNICH</b>		Date of completion of the search <b>16 October 2001</b>	Examiner <b>Giglietto, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 11 7432

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Place of search <b>MUNICH</b>		Date of completion of the search <b>16 October 2001</b>	Examiner <b>Giglietto, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 96 11 7432

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